ABSTRACT

An input apparatus that can be customized and utilized by users having a wide range of physical abilities. The Input apparatus can be used to act as the input interface for other devices. The invention can be incorporated into virtually

5   any device controlled by user commands and other forms of data entry. The simplest embodiment of the invention is conceptually similar to the keypad of a mobile phone. Inputs are made through the input surface, which is a collection of sparsely placed pressure, or touch sensitive, sensors which track the movement of the implement (user's finger or stylus). The implement is brought into contact

10   with the input surface and is moved across the input surface, visiting various preset points, optionally guided through channels in the input surface, along approximate straight or curved lines or paths. The series of lines, formed by the interconnection of the preset points forms a trace path. The trace path is stored in a database, through a training phase, wherein the user can "teach" the

15   invention his/her preferred valid inputs and associated symbols. The term "symbol" is defined as any character or other recognized glyph, known to the user, or to the corresponding device. When a valid input has been linked to a symbol, this is known as an association. Associations are controlled by the user and need have no logical meaning. The invention requires multiple sensors, at

20   least one processor (CPU), at least one power supply which may be provided by the corresponding device, at least one static memory module for storing the corresponding database and software and at least one implement and at least one output port through which information is emitted to the corresponding device.